WO 2005/008152 6 PCT/BR2004/000121

CLAIMS

for a refrigeration appliance evaporator An comprising a tube extension presenting an inlet (11) for the refrigerant fluid in liquid state and an outlet (12) for the refrigerant fluid in gaseous state, characterized in that said tube extension (10) least two tube portions (10a, comprises at arranged in series and having different diameters, which are dimensioned so as to quarantee, to the refrigerant fluid flow, a more uniform speed along the different tube portions, without altering the flow rate of this refrigerant fluid between the inlet (11) and the outlet (12) of the tube extension (10).

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- The evaporator as set forth in claim 1,
 <u>characterized</u> in that it comprises a transition region
 (20) interconnecting each two tube portions (10a, 10b)
 of different diameters and arranged in series.
 - 3. The evaporator as set forth in claim 2, characterized in that the transition region (20) has a diameter that varies between the diameters of the tube portions (10a, 10b) to which it is interconnected.
 - 4. The evaporator as set forth in claim 2, characterized in that the transition region (20) has a diameter that varies gradually.
- 25 5. The evaporator as set forth in claim 4, <u>characterized</u> in that the transition region (20) is substantially frusto-conical.
- 6. The evaporator as set forth in claim 2, characterized in that the transition region (20) is an annular tube portion, disposed orthogonal to the axis of the tube portions (10a, 10b) to which it is interconnected.